

ABSTRACT OF THE DISCLOSURE

A four-color ink set capable of printing an expanded color gamut has a cyan ink that prints on a reference substrate with CIELAB colorimetric aim values of $L^* = 54$, $a^* = -41$, and $b^* = -45$, within a $\Delta E^*_{ab} \leq 8$; a magenta ink that prints on the reference substrate with CIELAB colorimetric aim values of $L^* = 52$, $a^* = 79$, and $b^* = -9$, within a $\Delta E^*_{ab} \leq 8$; a yellow ink that prints on the reference substrate with CIELAB colorimetric aim values of $L^* = 90$, $a^* = -7$, and $b^* = 102$, within a $\Delta E^*_{ab} \leq 10$; and a black ink. Obtaining a profile for the expanded gamut ink set, for example an International Color Consortium (ICC) profile, that relates tone values for the ink set to colorimetric values for the printed ink allows the printer to obtain the maximum benefit of the expanded color gamut. The profile for the ink set is applied in a color separation process prior to printing the image on press.